

meshwork, allowing free access of aqueous from the anterior chamber through to the scleral portion of Schlemm's canal that contains the endothelial cells and most importantly the collector channels that lead back to the episcleral venous system.

[0023] In another embodiment, a Schlemmectomy surgical procedure, similar to a trabeculotomy, a schlemmectomy probe is inserted into Schlemm's canal under direct visualization through a scleral incision, such that the surface of the instrument faces the trabecular meshwork and the tissue comprising the pigmented and a portion of the non-pigmented trabecular meshwork facing into Schlemm's canal is removed by a cautery element, radio-frequency electrode, or an ultrasound transducer formed from a piezo-electric crystal.

[0024] This instrument is advantageous because it combines existing procedures with new technology, providing a simple solution for glaucoma treatment.

Brief Description of the Drawings

[0025] Figure 1 is a cross sectional schematic diagram of a human eye.

[0026] Figure 2 is a cross sectional schematic diagram which shows aqueous flow into and through the anterior chamber in a human eye.

[0027] Figures 3a-d shows diagrammatically the progression of the deformation of the lamina cribrosa in glaucoma.

[0028] Figures 4a-c show diagrammatically the steps of performing a goniotomy.

[0029] Figures 5a-d show diagrammatically the steps of performing a trabeculodialysis.

(F)
9/29/05
[0030] Figures ~~6a-e~~^{6a-f} show diagrammatically the steps of a trabeculotomy procedure using a probe of a preferred embodiment.

[0031] Figure 7 is a perspective view which shows a goniotomy cautery probe of a preferred embodiment.

[0032] Figure 8 is a cross-sectional schematic diagram which shows the goniotomy cautery probe of Figure 7.